

**BEFORE THE  
SURFACE TRANSPORTATION BOARD  
Washington, DC 20423**

223600

**In the Matter of:**

**USE OF A MULTI-STAGE DISCOUNTED CASH  
FLOW MODEL IN DETERMINING THE  
RAILROAD INDUSTRY'S COST OF CAPITAL**

**STB Ex Parte No. 664  
(Sub-No. 1)**

**COMMENTS OF  
ARKANSAS ELECTRIC COOPERATIVE CORPORATION**

Pursuant to the Board's decision served August 11, 2008, Arkansas Electric Cooperative Corporation (AECC) respectfully submits the following comments regarding the Board's proposal to use a multi-stage Discounted Cash Flow (DCF) model to complement its use of the Capital Asset Pricing Model (CAPM) in determining the cost-of-equity component of the railroad industry's cost of capital. AECC and its interests in this proceeding were described in the comments it submitted September 26, 2007 in Ex Parte No. 664.

In general, AECC defers to the Western Coal Traffic League (WCTL) and other parties to address detailed technical issues regarding the different cost-of-capital models and their implementation by the Board. However, in the comments it submitted April 14, 2008 in this proceeding, AECC discussed how, in the duopolistic operating environment of the Class I railroads, CAPM may artificially inflate the estimated cost of capital by misconstruing as

increased risk any higher carrier returns that in fact result from the increased exercise of market power. To protect against this outcome, AECC observed that “...(a) multi-stage DCF model that doesn’t permit the estimated cost of capital to deviate excessively from the long-run growth rate of the economy as a whole appears to provide an element of protection against the potential influence of increased market power on the CAPM methodology. In combination with CAPM, such a multi-stage DCF model could enhance the precision of the resulting cost-of-equity estimate.”

While the Morningstar/Ibbotson model referenced in the Board’s notice does incorporate the long-run growth rate of the economy, it does so only after two 5-year stages wherein the model results are determined entirely by the same type of analyst projections that form the heart of the single-stage DCF methodology already discarded by the Board. In the context of AECC’s previous observations regarding the possible effects of railroad market power on the measured cost of capital, this creates a significant problem. Basically, the first two stages of the Morningstar/Ibbotson model are susceptible to the same fundamental problem as is CAPM. To the extent that railroads are able to increase their exercise of market power, the resulting increase in profitability will almost certainly lead the analysts to increase their expectations of future returns, artificially inflating the cost of capital estimated by the proposed methodology.

The usefulness of a multi-stage DCF as a complement to CAPM stems primarily from its introduction of the long-run growth rate of the economy as a stabilizing factor. While the Board properly noted AECC’s support of the general proposition that a multi-stage DCF model could be useful, AECC’s support was explicitly premised on the proposition that such a model not “...permit the estimated cost of capital to deviate excessively from the long-run growth rate of the economy as a whole...” The Morningstar/Ibbotson model does not appear to possess this

property, and its use is therefore not supported by the considerations raised by AECC. Indeed, given that the CAPM model and the first two stages of the Morningstar/Ibbotson model may share a tendency to give the same wrong answer, there is no reason to believe that averaging of the two model results would produce the accuracy the Board seeks.

Under the principles of the Staggers Act and the national transportation policy, AECC believes the Board has an obligation to limit the railroad exercise of market power to that needed to ensure the financial health of the industry. While AECC does not question this Board's intent to fulfill that mandate, both of the models upon which the Board plans to rely appear to translate the increased exercise of rail market power to artificial increases in the estimated cost of capital. A mechanistic averaging of the results from the two models may give an appearance of reliability and stability, but basically would provide cover for the industry to retain contribution to which it is not entitled under any relevant regulatory or economic principle.

In theory, the converse is also true. For example, the railroads hypothesize that pro-competitive legislative initiatives would have material adverse impacts on their ability to engage in differential pricing. However, if procompetitive initiatives were undertaken and the railroads' fears came to pass, all else equal, the CAPM model would likely conclude that the railroad risk premium had declined, and the analyst expectations of future rail earnings would likely drop. Both models would thereby report artificial decreases in the estimated cost of capital.

To avoid unintended outcomes of either type, it is essential that the Board resist the allure of the mechanistic solution. Before undertaking any averaging of the results of different methodologies, the Board should devote its expertise to assessing the sources and significance of variations it may observe in the results reported by each methodology. Increases in "betas" that accompany substantial increases in rail traffic and profitability are implausible, as is the


proposition that rail investors must receive earnings growth materially above that achievable elsewhere in the economy.<sup>1</sup>

Most industries do not share the ability of railroads to wield formidable market power without a meaningful threat of entry by new competitors, and it is therefore not surprising that the Board must take care in interpreting the effects of market power on the results from measurement tools, like CAPM and DCF, that are normally applied to firms in more competitive marketplaces.<sup>2</sup> The Board exists largely as a result of the extraordinary economic characteristics of the rail industry, and should not subvert its expertise in rail market power issues to the cookie cutter tools used by Wall Street.

AECC appreciates this opportunity to participate in the refinement of the Board's cost-of-capital methodology.

Respectfully submitted,

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<sup>1</sup> On this basis, the Board could reasonably opt to reduce the reliance on analyst expectations embedded in the Morningstar/Ibbotson model (e.g., by shortening the duration of their influence and/or allowing the long-run growth rate of the economy to enter the computation on a sliding scale rather than hold it completely aside for 10 years).

<sup>2</sup> As noted by the Board in its August 11 decision, "...the same [DCF] model is used by Morningstar to estimate the cost of equity for hundreds of different industries."